## VanderbiltSportsMedicine

## **POSTOPERATIVE ELBOW ARTHROSCOPY PROTOCOL**

Most elbow arthroscopies are done for removal of loose bodies, synovectomy, or debridement. As such, in this patient population the goals for treatment are initially reduction of pain and edema, followed by restoration of range of motion, followed by strengthening. Patients may progress through these phases as tolerated. Early mobilization is essential as the elbow is prone to the development of stiffness.

1. Modalities

Utilized as necessary for pain, inflammation and joint stiffness.

2. Mobilizations

Begin with grade one joint oscillatory mobilization to help with pain control and diminish the effects of muscle co-contractions. Later midgrade II to end-range grade III-IV mobilizations may be performed to regain passive mobility by applying a stretch to the capsular tissue at the end ROM.

3. Flexibility/ROM

Manual stretching; assisted ROM using pulleys, cane, towel, Air dyne, UBE, Versa Climber, finger ladder, Plyoball exercise, body weight exercises. Work on elbow flexion/extension, and supination/pronation. If a patient is having difficulty regaining end ROM using mobilization techniques, then low-load long-duration stress may be applied to assist the remodeling of soft tissue resulting in tissue elongation. This is most often required to restore elbow extension. One technique to consider is the use of an elastic band secured to the floor by a weighted object and then secured under tension to the patient's distal forearm, with the patient lying supine and a rolled towel under the humerus.



Dynamic or static splinting may be required to help resolve stiffness that is refractory to other methods of restoring range of motion. This would be used rarely for patients who undergo a routine elbow arthroscopy, but may be indicated if capsular releases are performed for stiffness

4. Strengthening

Strengthening can commence then range of motion approaches normal. Strengthening should include flexion, extension, supination and pronation. Combined motions (e.g. flexion and pronation) may be particularly useful in throwing athletes as the flexor-pronator muscles may protect the ulnar collateral ligament.

## 5. Recommended Readings:

Blackburn TA. Rehabiliation of the shoulder and elbow after arthroscopy. Clin Sports Med 1987;6:587-606.

Brach P, Goitz RJ. Elbow Arthroscopy: Surgical techniques and rehabilitation. J Hand Ther 2006;19:228-37.

Wilk KE, Reinhold MM, Andrews JR. Rehabilitation of the thrower's elbow. Clin Sports Med 2004;23:765-801